



January 7, 2016

NAWCWD Threat/Targets team recycles, upgrades, brings knowledge home



One of the 20 rebuilt BQM-34-41s sits open during an avionics upgrade conducted in-house by the NAWCWD Threat/Targets Department in late 2015. (U.S. Navy photo)

What if you could rip the engine out of your '79 grocery-getter and make it run like a sports car for a third the cost of buying new?

Late last year, the Threat/Target Systems Department at Naval Air Warfare Center Weapons Division did just that with their BQM-34 aerial target, bringing life to 20 targets mothballed in the early 1990s. They went a step further and, rather than paying to have the old targets revamped by an outside contractor, they paid to learn how to do it themselves.

“We are running out of BQM-74s, our workhorse target, and its replacement isn’t ready yet,” said David Whitson, BQM-74/BQM-34 technical project officer. “Back in 2005, PMA-208 had funded Northrop Grumman to upgrade several BQM-34s, and we wanted more of them.”

But instead of just going back to Northrop Grumman, Whitson’s team wanted to learn to do the conversions in-house, upgrading the avionics in the old BQM-34-41 models to a more advanced BQM-34-55 model with systems more akin to the favored BQM-74.

“We wanted to bring the knowledge in house so that, in the future, we can upgrade more of



January 7, 2016

NAWCWD Threat/Targets team recycles, upgrades, brings knowledge home

these targets without having to go back to the contractor,” Whitson added.

Working side-by-side with Northrop-Grumman technicians, the TTSD team upgraded three targets, learning the process and documenting every step. The other 17 targets they finished in-house, purchasing the required avionics from Northrup-Grumman but doing the work themselves. The process saved the taxpayer nearly \$75,000 per unit.

More importantly, though, they created an official NAVAIR technical document for others to follow.

“We really got in there and got our hands dirty,” said Doug Evans, the team’s deputy assistant program manager for logistics.

And the upgrade leapfrogged the previous model in capabilities.

“The BQM-34 has been flying for over 50 years,” Evans said. “Now this modified -55 target is able to do things it could never before. People actually want to use it now.”

“The older model was iffy below 40 feet,” Whitson explained. “Now we’re comfortable going down to 10, which is a requirement for anti-ship cruise missile type events.”

The modification also upgraded the -41’s obsolete analog autopilot.

“Now it’s got power steering,” Evans said.

“We took an essentially useless target into the most advanced BQM-34 type target in the inventory,” Whitson said. “And now that we have the framework, we can do it again.”